REMARKS

This responds to the Office Action mailed on April 9, 2004. Claims 1-7 are amended, No claims are canceled. Claims 8 – 16 are added to more particularly claim certain aspects of the present computer-assisted methods. As a result, claims 1- 16 are now pending in this application.

Information Disclosure Statement

Applicant submitted an Information Disclosure Statement and a 1449 Form on February 26, 2003 and a Supplemental Information Disclosure Statement and a 1449 Form on January 30, 2004 . Applicant respectfully requests that initialed copies of the 1449 Forms be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

Claim Objections

The Office Action objected to claims 2 and 5 as being improper dependent claims. Applicant has amended these claims to put them in independent form. Accordingly, Applicant respectfully requests withdrawal of this basis of objection to these claims.

§101 Rejection of the Claims

Claims 1, 3-4, 6-7 were rejected under 35 USC § 101 as being directed to nonstatutory subject matter. The rejection states that "claims 1, 3-4, 6-7 do not recite any structure or functionality to suggest that a computer performs the recited claims." These claims have been amended to recite or incorporate such language. Accordingly, Applicant respectfully requests withdrawal of this basis of rejection of these claims.

§103 Rejections of the Claims

1.   Claims 1-2 and 6 were rejected under 35 U.S.C. § 103(a) for obviousness over Getchius et al.(U.S. Patent No. 6,643,640) in view of Wagstaff et al. (U.S. Patent No. 6,360,213). Applicant respectfully traverses.

The Office Action states:

As per claims 1-2, Getchius disclose an information retrieval application, a method for detecting content holes, comprising: parsing a content body into a plurality of concept nodes. (see column 4, lines 40 – 65) including a first ("i.e., "first node" see column 1 line 60 – 65) concept node. (see column 1 line 60 – 65).

(Office Action at 3.) Applicant respectfully disagrees with the Office Action's assertion that the cited portions of the Getchius reference show parsing a content body into a plurality of "concept nodes." The present patent application provides, among other things, an example explaining how pieces of information content are parsed to "concept nodes," that is, nodes representing concepts in the body of knowledge being parsed. (*See, e.g.,* Application at page 13, lines 18 – 23 and FIG. 3.)

By contrast, the cited portions of the Getchius reference apparently refer to computer hardware "server nodes" and not "concept nodes." (See, e.g., Getchius at column 4, line 56; column 1, line 64). In fact, Applicant cannot find in the cited portions of Getchius any disclosure, teaching, or suggestion of "concept nodes," or of parsing a content body into "concept nodes." The Office Action fails to provide any explanation of how the computer hardware "server nodes" in the cited portions of Getchius could reasonably be construed as "concept nodes."

Because "concept nodes" are entirely absent from the cited portions of Getchius, it follows that Applicant cannot find in the cited portions of Getchius any disclosure, teaching, or suggestion of determining a percentage of successful service interactions as a function of concept node, as recited or incorporated in claims 1-2 and 6. Similarly, Applicant cannot find in the cited portions of Getchius any disclosure, teaching, or suggestion of flagging a content hole if the percentage of successful service interactions at a particular concept node is below a predefined threshold, as also recited or incorporated in claims 1-2 and 6.

Moreover, regarding claim 6, Applicant cannot find in the cited portions of Getchius any disclosure, teaching, or suggestion of determining a percentage of queries as a function of the "concept nodes," determining a percentage of documents as a function of "concept node," and computing a content hole score for the first "concept node" as a function of at least one of the successful services interactions, the percentage of queries, and the percentage of documents.

The Office Action also asserts that Wagstaff teaches "flagging a content hole. . . in order to detect and identify data that falls below a certain level." (*See* Office Action at 5.) Applicant respectfully traverses this basis of rejection. Wagstaff apparently deals with a completely different subject, that is, hybrid target indexes, i.e., indexes that represent two different index values in very different ways to accommodate highly skewed data set domains. (*See* Wagstaff at Abstract). Moreover, Applicant cannot find any disclosure, teaching, or suggestion in the cited portions of Wagstaff or Getchius of parsing a content body into "concept nodes," as discussed above, and as recited or incorporated in claims 1-2 and 6. Therefore, even assuming that the cited portions of Wagstaff could somehow be construed as showing the flagging of a content hole, it cannot constitute flagging a content hole for a particular "concept node," as recited or incorporated in claims 1-2 and 6.

Similarly, Applicant cannot find any disclosure, teaching, or suggestion in the cited portions of Wagstaff or Getchius of determining a percentage of successful service interactions as a function of concept node, as recited or incorporated in claims 1-2 and 6. The present patent application explains that a successful service interaction (SSI) is one in which returned content (e.g., in response to a customer inquiry) matches that user's intent. However, the Office Action simply deems an SSI as somehow constituting "corresponding data sets, See column 26, lines 5 – 15" of Getchius. Not only is any notion of "corresponding data sets" absent from the cited portion of Getchius, the Office Action has not explained how "corresponding data sets" could somehow constitute a successful service interaction as used in the context of the present patent application.

Moreover, the Office Action has not cited any motivation actually presented in Wagstaff or Getchius for combining these references in the manner suggested in the Office Action. In the absence of any such motivation from the references themselves, Applicant respectfully submits that the combination amounts to impermissible hindsight based on the Applicant's own disclosure.

In sum, all elements of claims 1-2 and 6 are not present in the cited references, nor is there any objective evidence of a motivation to combine these references. Therefore, no *prima facie* case of obviousness exists with respect to these rejected claims. Accordingly, Applicant respectfully requests withdrawal of this basis of rejection of these claims.

2.　　　Claims 3, 4-5 and 7 were rejected under 35 U.S.C. § 103(a) for obviousness over

Getchius et al. in view of Papierniak et al. (U.S. Patent No. 6,151,584). Applicant respectfully

traverses.

First, Applicant respectfully disagrees with the Office Action's assertion that Getchius

somehow discloses determining a percentage of successful service interactions (SSIs). The

present patent application explains that a successful service interaction (SSI) is one in which

returned content (e.g., in response to a customer inquiry) matches that user's intent. However,

the Office Action simply deems an SSI as somehow constituting "corresponding data sets, See

column 26, lines 5 – 15" of Getchius. Not only is any notion of "corresponding data sets" absent

from the cited portion of Getchius, the Office Action has not explained how "corresponding data

sets" could somehow constitute a successful service interaction as used in the context of the

present patent application.

Second, even if Getchius could somehow be construed as showing determining a

percentage of SSIs, Applicant cannot find any disclosure, teaching, or suggestion in the cited

portions of Getchius or Papierniak of billing (charging a customer) as a function of the difference

between the percentage of successful service interactions in a typical information retrieval

system and the percentage of successful service interactions for services provided in the defined

information retrieval system, as recited or incorporated in claims 3-5. Instead, the cited portions

of Papierniak merely states:

> 5. A method of collecting subscriber specified information for supporting
> retrieval of information in analyzing Internet and/or electronic commerce data
> over or from the World Wide Web for service providers according to claim 1,
> wherein the business data includes at least one of pre-paid subscriber data, how
> the subscriber purchases services and products, subscriber discounts, billing rates,
> subscriber free subscriptions, and information.

(Papierniak at column 24, lines 34 – 42.) Applicant respectfully submits that nothing in this

cited portion of Papierniak even suggests charging a customer based on a difference between the

percentage of SSIs in a typical information retrieval system, and the percentage of SSIs in the

particular information retrieval system, as recited or incorporated in claims 3-5. Similarly,

nothing in this cited portion of Papierniak even suggests charging a customer based on a number

of SSIs in an information retrieval system, as recited in claim 7.

Because Getchius and Papierniak fail to disclose, teach, or suggest all elements of claims 3-5 and 7, Applicant respectfully submits that no *prima facie* case of obviousness exists with respect to these claims. Accordingly, Applicant respectfully requests withdrawal of this basis of rejection of these claims.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and

notification to that effect is earnestly requested. The Examiner is invited to telephone

Applicant's attorney at (612) 373-6951 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account

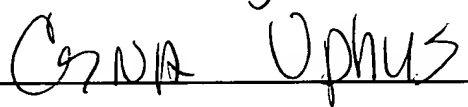No. 19-0743.
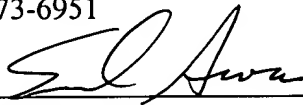
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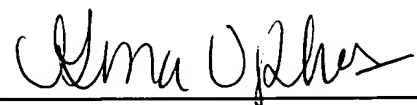
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Date   *Sept. 2, 2004*   By _____

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